

were next seen in September 1919, but no more were met with that winter until 9 March, 1920, when I saw a single one being chased by a Lugger Falcon.

Some Quail must undoubtedly breed in the district, as I received a clutch of four stale but unincubated eggs in May 1919 from some Sansis at Shorkot, who had been told to search for eggs of Sand-Grouse. In the neighbouring district of Lyallpur, Major Lindsay Smith records the Quail as breeding freely in April and May (Journal Bombay N. H. S. xxii. p. 200).

XXIV.—*Additional Notes on the Japanese species of Oceanodroma.* By NAGAMICHI KURODA, Rigakushi, F.M.B.O.U.

VISCOUNT Y. MATSUDAIRA, M.O.S.J., has recently sent me some examples of the Japanese Petrels of the genus *Oceanodroma* for identification. One of them is an apparently new addition to the Japanese avifauna.

I express my sincere thanks for the kindness of Viscount Matsudaira.

Oceanodroma leucorrhoa leucorrhoa (Vieillot).

Procellaria leucorhoa Vieill. *Nouv. Dict. d'Hist. Nat.* xxv. 1817, p. 422: Maritime parts of Picardy, France.

Leach's Petrel is found in the north Atlantic and north Pacific Oceans. It was recorded from the Kuril Islands as a breeding bird* and has been obtained off the Japanese islands of Yezo or Hokkaido †. It has also been recorded in the Pacific Ocean off the coast of Japan as a migrant ‡.

Dr. Oberholser ‡ mentioned that the examples from the

* Blakiston and Pryer, *Ibis*, 1878, p. 212; Oberholser, *Proc. U.S. Nat. Mus.* vol. lvii. 1917, p. 166; Hartert, *Vög. pal. Faun.* ii. 1920, p. 1414.

† Godman, *Monogr. Petrels*, vol. i. 1907-1910, p. 9; Hartert, *l. c.* p. 1414.

‡ Kittlitz, *Denkwürd. Reise Russ. Amer. Mikrones. und Kamts.* vol. ii. 1858, p. 191; Oberholser, *l. c.* p. 166.

northern Pacific Ocean, including the Commander and Kuril Islands, appear to be slightly darker than those from the north Atlantic Ocean, but this is probably due to the age of the specimens rather than to any subspecific difference.

I have examined only one specimen, which was obtained in one of the Kuril Islands, May 1918.

Measurements of the specimen :—

	Loc.	Exposed culmen.	Wing.	Tail.	Tarsus.	Mid. toe and claw.	Depth of tail-fork.
Matsudaira's Coll. No. 14325.	Kuril Is.	16 mm.	160	74.5 (lateral); 59 (central)	26	26	17

***Oceanodroma castro* (Harcourt).**

Thalassidroma castro Harcourt, Sketch of Madeira, 1851, p. 123 : Madeira.

The Madeiran Fork-tailed Petrel, often called the Hawaiian Petrel, has a very wide range, extending from the Atlantic to the Pacific. It is recorded from the Atlantic Ocean as a breeding bird*, and was obtained on Kauai Island, Hawaiian group, and described by Ridgway† under the name of *Cymochorea cryptoleucura*; it is not yet recorded from Japan.

Viscount Matsudaira, however, obtained an adult specimen of the species, which was captured in the River Daiyagawa, Nikko, Prov. Shimotsuke, C. Hondo, Japan, in November 1906. This specimen agrees well with the description and plate of Godman's 'Monograph of the Petrels' (vol. i. p. 15, pl. 5). It is a blacker and smaller bird than the preceding species, *leucorrhœa*, and has distinct, broad, black tips to the white upper tail-coverts. The outer tail-feathers have a white patch to their bases. The depth of tail-fork is only 7 mm. instead of 17 mm. It is no doubt a straggler from sea-coast to the mountainous river where it was captured, and is the only record of the species obtained in Japan.

* Godman, *l. c.* i. p. 16; Hartert, *l. c.* ii. p. 1415.

† Ridgway, Proc. U.S. Nat. Mus. iv. 1882, p. 337.

Measurements of the Japanese specimen are as follows :—

	Loc.	Exposed culmen.	Wing.	Tail.	Tarsus.	Mid. toe and claw.	Depth of tail-fork.
Matsudaira's Coll. No. 812.	Nikko, Japan.	15 mm.	147	66·5 (lateral) 61 (central)	21	22	7

***Oceanodroma monorhis monorhis* (Swinhoe).**

Thalassidroma monorhis Swinh. Ibis, 1867, p. 386 ; 1869, p. 348 : Amoy, China.

Swinhoe's Fork-tailed Petrel is only known from near Vladivostock, Japan (Prov. Mutsu, N. Hondo, Loo-Choo Is.), and coast of China (Amoy). Swinhoe says that it had been found breeding in the Liu-Kiu Islands*, but Dr. Hartert writes as follows:—"Die Angabe vom Nisten auf den Riu-Kiu-Inseln ist zweifelhaft" †.

I have examined only two specimens of the form from Japan. One of these is preserved in the Science College Museum, Tokyo ; it was obtained in the Prov. Mutsu, N. Hondo, and has already been mentioned by Dr. Stejneger ‡. Another one is in the possession of Viscount Matsudaira, and was obtained in Prov. Yamato, S. Hondo, date unknown. This is a new locality for the form in Japan.

The latter specimen measured by me is as follows :—

	Loc.	Exposed culmen.	Wing.	Tail.	Tarsus.	Mid. toe and claw.	Depth of tail-fork.
Matsudaira's Coll. No. 4596.	Yamato, Hondo.	14·5 mm.	141	63·5 (lateral) 56·5 (central)	24	22·5	8

The length of wing and tail of this specimen somewhat

* Swinhoe, P. Z. S. 1871, p. 422.

† Hartert, Vög. pal. Faun. ii. p. 1416.

‡ Stejneger, Proc. U.S. Nat. Mus. xvi. p. 622.

shorter than the measurements given by Godman* and Hartert †.

***Oceanodroma furcata* (Gmelin).**

Procellaria furcata Gm. Syst. Nat. i. pt. 2. 1789, p. 561 :
"Habitat in glacie maris, Americam et Asiam interfluentis."

The Grey Fork-tailed Petrel is found in the northern Pacific Ocean south to California. It breeds on Copper Island, in Behring Sea, Aleutian Islands, etc., and probably on the Kurils ‡. In Japan, it has been obtained in summer near Kobe, S. Hondo §, and in spring near the mouth of the Abe River, Prov. Suruga ¶. A specimen was obtained in Sagami Bay and reported by the late Mr. Ogawa ¶.

I have an adult specimen which measures as follows :—

	Loc.	Exposed culmen.	Wing.	Tail.	Tarsus.	Mid. toe and claw.	Depth of tail-fork.
Kuroda's Coll. No. 546.	Suruga Bay.	15.5 mm.	161	90 (lateral) 64.5 (central)	25	27.5	23

XXV.—*On the Representatives of Corythornis leucogaster (Fraser) in the Cameroon and the Congo.* By JAMES P. CHAPIN, American Museum of Natural History.

(Plate V.)

WHEN Professor Oscar Neumann** called attention to the differences of colour and dimensions that distinguish his Upper Guinea race, *Alcedo leucogaster bowdleri*, from the typical form of Fernando Po, he remarked also that the

* Godman, Monogr. Petrels, i. p. 35.

† Hartert, *l. c.* p. 1416.

‡ Blakiston and Pryer, *Ibis*, 1878, p. 218; Stejneger, *l. c.* xxi. p. 278; Hartert, *l. c.* p. 1417.

§ Hartert, *l. c.* p. 1417.

¶ Ogawa, "Dobutsugaku Zasshi," xviii. 1906, p. 159.

¶ Ogawa, Annot. Zool. Japon. 1908, p. 339.

** Bull. Brit. Orn. Cl. xxiii. 1908, p. 14.